

## POSITIVE-ELECTRODE ACTIVE MATERIAL FOR LITHIUM SECONDARY BATTERY AND ITS MANUFACTURE

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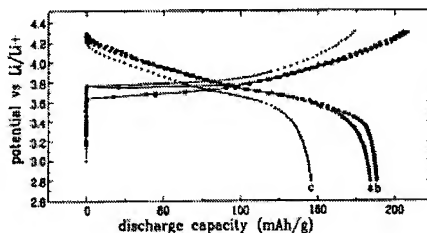


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### Abstract of JP2000058059

**PROBLEM TO BE SOLVED:** To provide a positive-electrode active material for a lithium secondary battery superior in electrochemical performance, and to provide a manufacturing method of the positive-electrode active material for a lithium secondary battery capable of suppressing generation of an undesired impurity phase (minor phase).

**SOLUTION:** A positive-electrode active material for a lithium secondary battery is constituted of a substance of the formula  $\text{Li}_x\text{Ni}_{1-y}\text{Co}_y\text{O}_2$ , including giant particles having a size of 1 to 25  $\mu\text{m}$  formed of a multiplicity of fine particles having a size of 0.4 to 0.7  $\mu\text{m}$ . A lithium salt, nickel salt and cobalt salt are dissolved in a solvent at a molar ratio of  $(0.95\text{--}1.06):(0.5\text{--}1):(0\text{--}0.5)$ , then a chelator is added thereto, a gel is manufactured by heating this mixture, an organic/inorganic precursor is formed by heat-decomposing the gel, and the positive electrode active material of the formula for a lithium secondary battery is manufactured by heat-treating the precursor. In the formula, (x) is 0.95 to 1.06, more preferably, 1.01 to 1.05, and (y) is 0 to 0.5.



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